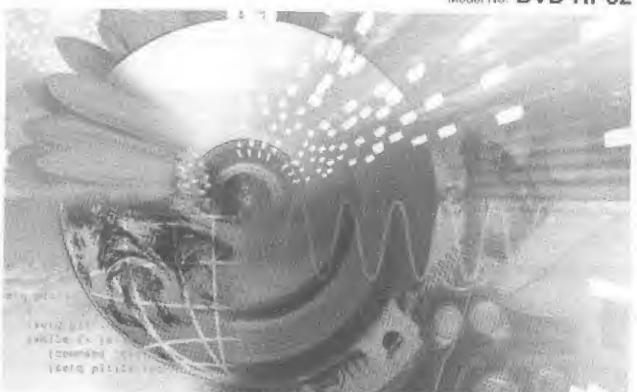




DVD/CD PLAYER

Operating Instructions

Model No. DVD-RP62



Before connecting, operating or adjusting this product, please read these instructions completely, Please keep this manual for future reference.







As an ENERGY START Partner fantagenin has determined that this product mosts the ENERGY START guidelines for energy efficiency.



This manual was printed with say based ink.



For U.S.A. only

The warranty can be found on page 22.

En la página 23 hay una guia de referencia rápida en español.

Region number supported by this player

Region numbers are allocated to DVD players and

software according to where they are sold.

 The region number of this player is "1". The player will play DVDs marked with tabels

containing "1" or "ALL". Example:





Dear customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully.

Operations in these instructions are described mainly with the remote control, but you can do the operations on the main unit if the controls are the same.

Accessories



Please check and identify the supplied accessories.

Use numbers indicated in parentheses when asking for replacement parts.

(For U.S.A.)

To order accessories contact 1-800-332-5368 or web site (http://www.panasonic.com).

(For Canada)

To order accessories, call the dealer from whom you have made your purchase.

1 Remote control (N2QAJB000043)



2 Batteries for remote control



1 Audio/video cable (VJA0788)



1 AC power supply cord (RJA0065-A)



Note

The included AC power supply cord is for use with this unit only. Do not use it with other equipment.

User memo:

DATE OF PURCHASE		
DEALER NAME		
DEALER ADDRESS		
TELEPHONE NUMBER		

The model number and serial number of this product can be found on either the back or the bottom of the unit.

Please note them in the space provided below and keep for future reference.

icicience.

DVD-RP62

MODEL NUMBER __ SERIAL NUMBER __

OT6526

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(Spanish Quick Reference)

CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

CAUTION:

TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

THE FOLLOWING APPLIES ONLY IN THE U.S.A.

CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- •Increase the separation between the equipment and
- •Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ●Consult the dealer or an experienced radio/TV technician for help.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

DANGER -	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.	A 21 CFR)
CAUTION -		C80825-1)
ATTENTION	 RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUT EXPOSITION DANGEREUSE AU FAISCEAU. 	/ERTURE
ADVARSEL:	 SYRLIG OG USYNLIG LASERSTRÅLING VED ÅEINING. UNDGÅ UDSÆTTELSE FOR STRÅLING. 	
VAROI	– AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	
VARNING	 SYNLIG OCH ÖSYNLIG LASERSTRÄLNING NÄR DENNA O ÄR ÖPPNAD, BETRAKTA EJ STRÄLEN. 	EL.
ADVARSEL :	 SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPI UNNGÅ EKSPONERING FOR STRÅLEN. 	
VORSICHT :	 SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG, WENN AE GEÖFFNET, NICHT DEM STRÄHL AUSSETZEN. 	DECKLING
注章	- 打开时有可见及不可见激光辐射、避免激光。	、財 財
注章	- ここを聞くと可接及び不可視のレーザー光が出ます。 ビームを直接見たり、触れたりしないてください。	C)L80233

(Inside of product)

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the safety precautions listed below. Keep these operating instructions handy for future reference.

Safety

- Power source—Connect the unit to a power source of the type described in these instructions or as marked on the unit.
- 2. Polarization—The unit is equipped with a polarized power plug where one blade is wider than the other. This safety feature ensures that the plug fits into your household AC outlet only one way. If the plug doesn't fit one way, try reversing it. If the plug still doesn't fit, contact an electrician to replace the obsolete outlet. Do not attempt to defeat the safety purpose of the plug.
- Power cord protection—Route the AC power supply cord so that it will not be walked on or pinched by items placed on or against it. Never take hold of the plug or cord with wet hands. Always grasp the plug body firmly when connecting and disconnecting it.
- Overloading—When connecting the AC power supply cord, be careful
 not to overload the household AC outlet, extension cord, or outlet from
 any other device as this can result in fire or electric shock.
- Nonuse periods—Turn the unit off when it is not in use. Unplug the unit from the household AC outlet if it is not to be used for a long time. Unplug the unit during lightning storms.
- Attachments and accessories—Use only the attachments and accessories recommended in these operating instructions.

Installation

Placement

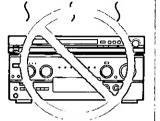
- Ventilation—Situate the unit so that it receives proper ventilation. Do
 not install in a confined space such as a bookcase or cabinet. Allow at
 least 10 cm (4 inches) clearance from the rear of the unit. To prevent
 the risk of electric shock or fire due to overheating ensure curtains and
 other materials do not obstruct the unit's ventilation.
- Foreign material—Ensure objects and liquids do not get into the unit. Avoid exposing the unit to excessive smoke, dust, mechanical vibration, and shock.
- Magnetism—Situate the unit away from equipment and devices that generate strong magnetic fields.
- 4. Stacking-Do not place heavy objects on top of this unit.
- 5. Surface -- Place the unit on a flat, level surface.
- Carts and stands—Use the unit only with carts and stands recommended by the manufacturer. Move carts with care. Sudden stops, excessive force, and uneven surfaces can cause carts to overturn.



Wall and ceiling mounting—Do not mount the unit on walls or ceilings unless specified in the instructions.

Do not place the unit on amplifiers or equipment that may become hot.

The heat can damage the unit.



Environment

- Water and moisture—Do not use the unit near water, such as near a bathtub or swimming pool. Avoid damp basements.
- Heat—Situate the unit away from heat sources, such as radiators.

Do not situate where temperatures fall below 5°C (41°F) or rise above 35°C (95°F).

Maintenance

(See below for details.)

Unplug the unit from the household AC outlet before cleaning. Clean with a damp cloth.

Do not use abrasive pads, scouring powders, or solvents.

Service

- Damage requiring service—The unit should be serviced by qualified service personnel if:
 - (a) The AC power supply cord or the plug has been damaged; or
 - (b) Objects or liquids have gotten into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped or the cabinet damaged.
- Servicing—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- Replacement parts—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- Safety check—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Maintenance

To clean this unit, wipe with a soft, damp cloth.

Never use alcohol, paint thinner or benzine to clean this unit.

Before using chemically treated cloth, read the instructions that came with the cloth carefully.

■ Discs that can be played

Disc type	Logo	Indication used in instructions
DVD-Video	DYD VIDEO	DVD-V
DVD-R	R R 4.7	
CD*	COMPACT DIGITAL AUDIO	(CD)
Video CD	OCOMPACT OCTAL VIDEO	VCD

^{*}Including CD-R/RW and discs recorded with MP3 and WMA. Do not use irregularly shaped discs (e.g. heart-shaped), as these can damage the unit.

■ Discs that cannot be played

DVD-Audio, PAL discs, DVD-ROM, DVD-RAM, CD-ROM, CDV, CD-G, +RW, DVD-RW, CVD, SVCD, SACD, Divx Video Discs and Photo CD.

DVDs that can be played

This unit has a Dolby Digital decoder so you can play DVDs with this mark.



This unit does not have a DTS decoder. Connect this unit to equipment that has a DTS decoder to enjoy DVDs with this mark.



■ Playing DVDs and Video CDs

The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions. Read the disc's instructions carefully.

■ CD-R and CD-RW discs

This unit can play CD-R and CD-RW if they are formatted as CD-DA (digital audio) or video CD and finalized*.

■ DVD-R discs

Panasonic DVD-R recorded and finalized* on a Panasonic DVD video recorder are played as DVD-Video on this unit.

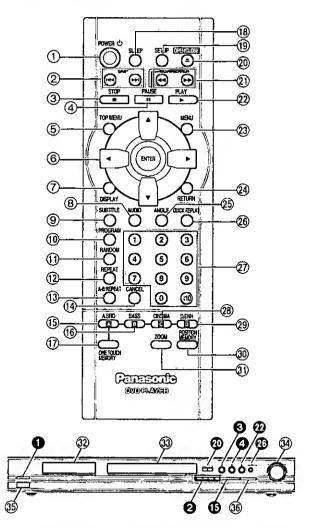
*A process that allows these play on compatible equipment.

Note

It may not be possible to play CD-R, CD-RW and DVD-R in all cases due to the type of disc or condition of the recording.

■ Handling precautions

- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to discs. (Do not use discs with exposed adhesive from tape or left over peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- •Do not use discs printed with label printers available on the market.



Buttons such as 1 function the same as the buttons on the remote control.

Do not:

(6)

(7)

(T)

(1)

(14)

(f)

68)

(20)

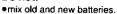
(21)

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6A)

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② Display



•use different types at the same time.

Remote control signal sensor

- heat or expose to flame.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- ·use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

Standby/on switch (POWER (b))

Press to switch the unit from on to standby mode or vice versa.

In standby mode, the unit is still consuming a small amount of power.

 Skip buttons (I◄◄, ►► SKIP)
 9

 Stop button (■ STOP)
 8

 Pause button (■ PAUSE)
 8

 Top menu button (TOP MENU)
 9, 11

Cursor buttons (▲, ▼, ◄, ▶)/Enter button (ENTER)8

 Audio button (AUDIO)
 13

 Subtitle button (SUBTITLE)
 13

 Program button (PROGRAM)
 10

 Random play button (RANDOM)
 10

 Advanced Surround button (A A.SRD)
 12

 Bass plus button (B BASS)
 12

One touch cinema memory button (ONE TOUCH MEMORY) . . 13

Sleep button (SLEEP) 9

Open/close button (≜ OPEN/CLOSE) 8

Slow/Search buttons (◄◄, ▶▶ SLOW/SEARCH)9

Play button (▶ PLAY)8

Menu button (MENU)9

Return button (RETURN) g

 Quick replay button (QUICK REPLAY)
 9

 Numbered buttons (1-9, 0, ≥10)
 9

 Cinema button (IC CINEMA)
 12

 Disc tray
 8

 Shuttle dial (◀◀, ▶▶)
 9

Progressive out button/indicator (PROGRESSIVE OUT) 8

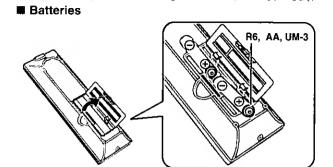
Page

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

عوا ا

Aim at the sensor, avoiding obstacles, at a maximum range of 7 m (23 feet) directly in front of the unit.

The remote control



- Insert so the poles (+ and −) match those in the remote control.
- •Do not use rechargeable type batteries.

Connection to a television

This page explains how to connect the unit to a television and set it up so you hear the audio through the television's speakers. To get the full benefit from the powerful multi-channel audio found on DVDs, you should connect an amplifier and speakers (= page 18).

Before connection

- Disconnect the AC power supply cord.
- Refer to the television's operating instructions.

To enjoy progressive video

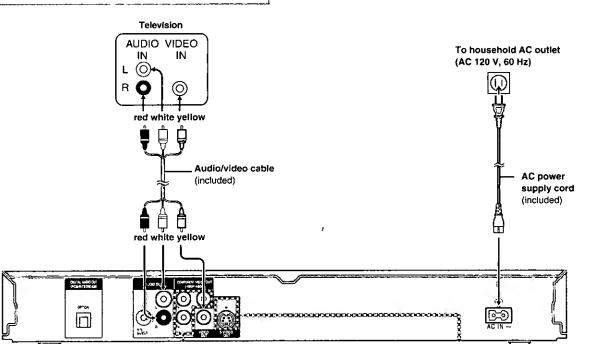
- . Connect to the component video (480p) input terminals on a television compatible with this unit's copy guard system. (Video will not be displayed correctly if connected to an incompatible television.)
- In QUICK SETUP, set "Progressive Out" to "Enable" (page 8).

For your reference

All televisions manufactured by Panasonic and that have 480p input connectors are compatible. Consult the manufacturer if you have another brand of television.

Connect your unit directly to your television.

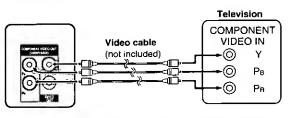
Do not connect the unit through your video cassette recorder when setting up your home entertainment system, because the picture may not be played correctly due to the copy guard.



COMPONENT VIDEO OUT terminal

These terminals can be used for either interlace or progressive output and provide a purer picture than the S VIDEO OUT terminal. Connection using these terminals outputs the color difference signals (Pe/Pe) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors.

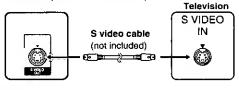
- The description of the component video input terminals depends on the television or monitor (e.g. $Y/P_B/P_B$, Y/B-Y/R-Y, $Y/C_B/C_B$). Connect to terminals of the same color.
- · After making this connection, change the black level for a better picture (= page 16, Video-Black Level Control).



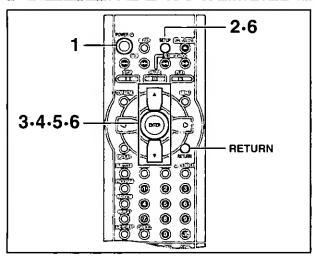
When making this connection, ensure you connect the audio cables to the corresponding audio input terminals on the television.

S VIDEO OUT terminal

The S-video terminal achieves a more vivid picture than the VIDEO OUT terminal by separating the chrominance (C) and luminance (Y) signals. (Actual results depend on the television.)



When making this connection, ensure you connect the audio cables to the corresponding audio input terminals on the television.



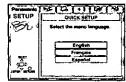
Remote control only

The **QUICK SETUP screen** appears when you press [SETUP] the first time after purchase and assists you to make necessary settings. You can access this screen again later if you need to (➡ page 16, Others—QUICK SETUP).

Preparation

Turn on the television and select the appropriate video input on the television to suit the connections for the player.

- 1 Press [POWER (b)] to turn on the unit.
- 2 Press [SETUP] to show the QUICK SETUP screen.



- 3 Press [▲, ▼] to select the menu language and press [ENTER].
- 4 Press [▲, ▼] to select "Yes" to continue and press [ENTER].
- 5 Press [▲, ▼] to select the item and press [ENTER].
 - Audio Language (For setting details → page 16)
 - Subtitle Language (For setting details → page 16)
 - TV Aspect (For setting details → "TV Aspect", below)
 - Progressive Out (For setting details → page 16)
- 6 Press [ENTER] and then [SETUP] to end the settings.

To return to the previous screen Press [RETURN].

■ TV Aspect

Select "4:3" (regular) or "16:9" (widescreen) to suit your television. If you have a regular 4:3 television, you can also select how video on some discs is shown (→ page 16, Video—TV Aspect).

- •4:3 Pan&Scan (Factory preset)
- Widescreen software is expanded to fill the screen of a 4:3 aspect television (unless prohibited by the producer of the disc).
- e 4:2 Lattarba
- Widescreen software is shown in the letterbox style on a 4:3 aspect television.



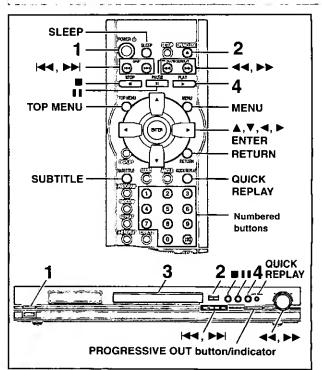
16:9 aspect pictures are shown correctly, but 4:3 aspect pictures are stretched horizontally to fill the screen.

- If your television can change the aspect when input is progressive.

 "By Use the television to change the aspect to the correct one."
- If your television cannot change the aspect when input is progressive

Press [PROGRESSIVE OUT] so the indicator goes out. Output will now be interlace and 4:3 aspect picture is shown in the middle of the screen.

Basic play



DVD-V CD VCD

- 1 Press [POWER (b)] to turn on the unit.
 For progressive output
 Press [PROGRESSIVE OUT] so the indicator lights.
- 2 Press [▲] to open the disc tray.
- 3 Place the disc on the disc tray.

Label-up (With double-sided discs, load so the label for the side you want to play is facing up.)

4 Press [▶] (PLAY).

The disc tray closes and play begins.

(MP3/WMA)

Group and track names are displayed on the television. Press [SUBTITLE] to turn the display on or off.

To stop play

Press [■] (⇒ page 11, Resume function).

To pause play

Press [11] during play.

Press [▶] (PLAY) to restart play.

Note

If "♥" appears on the television

The operation is prohibited by the unit or disc.

- Discs continue to rotate while menus are displayed even after playing an item. Press [■] when you finish to preserve the unit's motor and your television screen.
- Volume may be lower when playing DVDs than when playing other discs or during television broadcasts. Reduce the volume before playing other sources so that a sudden increase in output does not occur.
- Progressive output is not possible if the "Progressive Out" setting is left as "Disable" in the QUICK SETUP menus.
- •Although the progressive out indicator lights if you press [PROGRESSIVE OUT] after changing the "Progressive Out" setting to "Enable", output will still only be interlace if you have connected the unit to your television through the VIDEO OUT or S VIDEO OUT terminals.

When a menu screen appears on the television

DVD-V VCD

Remote control only

Press the numbered buttons to select an item.

To select a 2-digit number

Example: To select item 23, press [≥10] = [2] = [3].

When playing DVDs, you can also use [▲, ▼, ◄, ▶] to select items.
 Press [ENTER] to confirm your selection.

Play of the selected item now begins.

Other buttons used to operate menus

Read the disc's instructions for further details about operation.

[]: Shows the next menu.

[]: Shows the previous menu.

[RETURN]: Shows the menu screen. VCD

[TOP MENU]: Shows the first menu screen. DVD-V

[MENU]: Shows the menu screen. DVD-V

Replaying a scene — QUICK REPLAY

DVD-V CD VCD

Skip back a few seconds within the current item (track or title).

During play

Press [QUICK REPLAY].

Note

This feature may not work while playing some parts of a disc or at all with some discs.

Setting the unit to turn off - SLEEP timer

DVD-V CD VCD

Remote control only

Press [SLEEP] to select the setting.

Each time you press the button:

OFF \rightarrow AUTO* \rightarrow 60 min \rightarrow 90 min \rightarrow 120 min

*The unit turns off 5 minutes after play finishes.



The unit turns off after 60 minutes.



To cancel the SLEEP timer

Press [SLEEP] to select "OFF".

To confirm the remaining time

Press [SLEEP].

Note

- AUTO also works with DVDs that show a menu after play finishes.
- AUTO does not work if you press [III], [MENU], or [TOP MENU]. It is activated again when you restart play.
- AUTO does not work correctly with some discs (e.g., if menus appear after playing Video CDs).

■ Auto standby

The unit switches to standby mode after about 30 minutes in the stop mode, irrespective of the SLEEP setting.

Skipping items

DVD-V CD VCD

During play or while paused

Press [| ◀ ◀] or [▶ ▶ |].

Each press increases the number of skips.

Fast forward and rewind SEARCH

DVD-V CD VCD

During play

Press [◀◀] or [▶▶].

- Turn the shuttle dial [◄◄, ►►] on the main unit. Play starts again when
 you release the shuttle dial.
- Audio will be heard during search (except for WMA files). You can turn this audio off if you want to (⇒ page 16, Audio—Audio during Search).

Slow-motion play

DVD-V (VCD)

While paused

Press [◀◀] or [▶▶].

Turn the shuttle dial $[\blacktriangleleft, \blacktriangleright \blacktriangleright]$ on the main unit. The picture stills again when you release the shuttle dial.

Frame-by-frame viewing

DVD-V VCD

Remote control only

While paused

Press [**◄**] or [**▶**].

The frame changes each time you press the button.

- •The frames change in succession if you press and hold the button.
- Pressing [■■] also activates forward frame-by-frame.

Notes

- •The speed of search and slow-motion increases up to 5 steps.
- Press [►] (PLAY) to restart play.
- You cannot move backwards with Video CD during slow-motion and frame-by-frame.

When playing Video CDs with playback control

Turning the shuttle dial or pressing buttons to perform skip, search or slow-motion may take you to a menu screen.

Starting play from a selected item

DVD-V CD VCD

Remote control only

Press the numbered buttons to select the item.

To select a 2-digit number

Example: To select track 23, press [≥10] = [2] = [3].

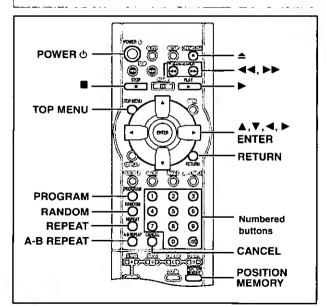
CD (MP3/WMA)

Press [ENTER] after pressing the numbered buttons. (You do not have to press [≧10].)

Play starts from the selected item.

Note

This works only when stopped with some discs.



DVD-V CD VCD

(When the elapsed play time is displayed)

Remote control only

Repeat play

During play

Press [REPEAT].



The indication changes each time you press the button.

DVD-V

C: Chapter T: Title

A: Selected chapters*

OFF

CD VCD T. Track

A: Entire disc

Selected tracks*

OFF

G: Group A: Selected tracks* OFF

T: Track

(MP3/WMA)

*During program and random play

If the Video CD has playback control

- Press (■) to clear "PBC" from the display.
- Press the numbered buttons to select a track to start play (⇒ page 9).
- Press [REPEAT] (⇒ above).

Note

You cannot use repeat play to repeat an entire DVD or MP3/WMA disc.

■ To repeat only your favorite tracks/chapters Start program play (right) and press [REPEAT] to display "A".

A-B repeat play

You can repeat a section between points A and B within a title or track.

- Press [A-B REPEAT] at the starting point (A).
- Press [A-B REPEAT] at the finishing point (B).





To cancel

Press [A-B REPEAT] to display "**".

Note

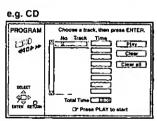
- Some subtitles recorded around point A or B may fail to appear.
- The unit automatically determines the end of a title/track as point B when the end of the title/track is reached.
- · A-B repeat is canceled when you press [QUICK REPLAY].

Program play

You can select up to 32 items to play in the order you choose.

While stopped

Press [PROGRAM].



Program No.

Random Playback

Press PLAY to stan



DVD-V. MP3/WMA only

Press the numbered buttons to select:

- a title : DVD-V

- a group : [GD] (MP3/WMA)

Some items cannot be selected.

- Different titles have different soundtracks and subtitles.
- Press the numbered buttons to select:

- a chapter : DVD-V

- a track : (OD VCD)

(IMP3/WMA only) and press [ENTER]).

- Repeat steps 2 and 3 to program other items.
- •Times are not displayed when programming DVD and MP3/WMA.

Press [▶] (PLAY).

Play now begins in the programmed sequence.

•Some items will not be played even if you programmed them. DVD-V

To select using the cursor buttons

Press [ENTER] and [▲, ▼] to select an item, then press [ENTER] again to register. Select "ALL" to enter all items (on the disc or in the title or group).

Changing the program

Press [▲, ▼] to select an item.

- -To change an item, repeat steps 2 and 3.
- -To clear an item, press [CANCEL] (or select "Clear" and press [ENTER]). Press [◄◄] or [▶▶] to change pages.

To clear the whole program

Move to "Clear all" with {▲, ▼, ◄, ▶] and press (ENTER). The whole program is also cleared when the unit is turned off or the disc tray is opened.

To exit the program mode

Press [PROGRAM] while stopped. (The program is retained in memory.)

Random play

While stopped

Press [RANDOM].

DVD-V only

Press the numbered buttons to select a title.

Press [▶] (PLAY).

Play now begins in random order.

Some items cannot be selected. DVD-V

To exit the random mode

Press [RANDOM] while stopped.

Using menus to play MP3 and WMA discs

CD (MP3/WMA)

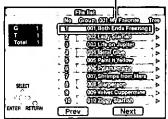
This unit can play MP3 and WMA (Windows Media Audio) files recorded on CD-R/RW with a computer.

Files are treated as tracks and folders are treated as groups.

Remote control only

1 Press [TOP MENU].

Group name



2 Press [▲, ▼] to select the track and press [ENTER].

Play continues to the last track in the last group.

"cr" indicates the track currently playing.

To show other pages

Press [\blacktriangle , \blacktriangledown , \blacktriangleleft , \blacktriangleright] to select "Prev" or "Next" and press [ENTER]. After listing all the tracks in one group, the list for the next group appears. To exit the file list

Press [TOP MENU].

Using the tree screen to find a group

1 Press [▶] while a track is highlighted to display

You cannot select groups that contain no compatible files.

2 Press [▲, ▼] to select a group and press [ENTER].

The file list for the group appears.

For your reference

Press [◀, ▶] to jump layers in the tree screen.

To return to the file list

Press [RETURN].

Note

- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- •If you play an MP3/WMA track that includes still picture data, it will take some time before the music itself starts playing and the elapsed time will not be displayed during this time. Even after the track starts, the correct play time will not be displayed.

MP3 discs

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats). MP3 files must have the extension ".MP3" or ".mp3".
- This unit is not compatible with ID3 tags.
- •This unit is not compatible with files with a sampling rate of 32 kHz.

WMA discs

- When creating a WMA disc, ensure the copyright feature is off.
- •WMA files must have the extension ".WMA" or ".wma".
- ●This unit can play WMA files with a compression rate of 48 kbps or more.
- ◆Noise may occur when playing WMA files.
- •There are some files this unit cannot play (e.g., copyright protected). "TRACK PROTECTED" or "CANNOT PLAY THIS TRACK" appear on the unit's display to indicate such tracks.

Naming folders and files

At the time of recording, prefix folder and file names with 3-digit numbers in the order you want to play them (this may not work at times).

Example: MP3 root 001.mp3 002.mp3 003.mp3 003.mp3 004.mp3 004.mp3 005.mp3 006.mp3 007.mp3 008.mp3 009.mp3

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.



Resume function

DVD-V CD VCD

(When the elapsed play time is displayed)

The position you stopped play at is recorded by the unit when ">" is flashing on the display.



While "">" is flashing, press [▶] (PLAY) to start play from where you stopped it. (When playing DVD ➡ Chapter Preview below)

•The position is cleared when the disc tray is opened or the unit is switched to standby.

To clear the position

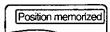
Press () before recalling the memorized position.

Position Memory function

Remote control only

This function allows you to memorize a position to start from even after switching the unit to standby or changing discs. You can memorize positions on up to five different discs at a time. When you memorize another position, the earliest position is replaced.

1. During play, press [POSITION MEMORY].



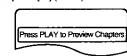
- Press [POWER (b)] to switch the unit to standby or press [♠] to remove the disc.
- When you are ready to play the disc again, press [►] (PLAY).
 Play starts from the memorized position and the position is cleared.
 (When playing DVD → Chapter Preview below)

To clear the position

Press [] before recalling the memorized position.

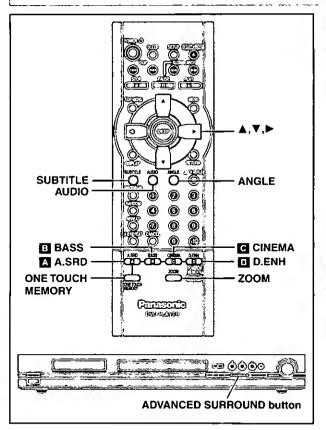
Chapter Preview DVD-V

The message appears immediately after you press [▶] (PLAY).



Press [▶] (PLAY) while the message is displayed and the beginning portions of each chapter up to the current one are played. Full play resumes from the point where you pressed [■] or [POSITION MEMORY]. (This feature works only within a title.)

If you do not press [▶] (PLAY), the message disappears and play starts from where you pressed [■] or [POSITION MEMORY].



Use the A B C D buttons to control the following features, used to enhance your enjoyment of movies. ONE TOUCH CINEMA MEMORY then allows you to store the settings and recall them at a touch of a button. Turn ADVANCED SURROUND and BASS PLUS off when using Dolby Pro Logic. Dolby Pro Logic will not work correctly if they are on.

A ADVANCED SURROUND

DVD-V

(Dolby Digital, 2-channel or over only)

Use ADVANCED SURROUND to enjoy a surround-like effect if you are using 2 front speakers.

If you are playing a disc with surround effects recorded on it, the effect is broadened and sound seems to come from virtual speakers on either side.

Press [A A.SRD].

Each time you press the button:

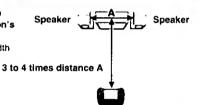
1: Natural effect —→2: Emphasized effect ☐— OFF: Cancel (Factory preset) ←—





Optimum seating position <When using the television's speakers>

Distance A=Television's width



Seating position

Note

- ADVANCED SURROUND will not work, or will have less effect with some discs.
- Turn off the surround sound effects on the equipment you have connected when using this effect.

Turn ADVANCED SURROUND off if it causes distortion.

B BASS PLUS

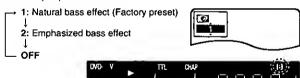
DVD-V GD VCD

Remote control only

Turn BASS PLUS on when you have connected an active subwoofer to the SUBWOOFFR terminal on the rear of the unit (➡ page 18)

Press [BASS].

Each time you press the button:



C CINEMA

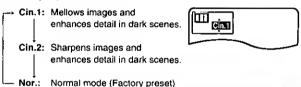
DVD-V VCD

Remote control only

You can change the picture quality for movie viewing.

Press [C CINEMA].

Each time you press the button:





Note

You can make finer adjustments to the picture if desired (→ page 15, Video menu).

D DIALOGUE ENHANCER

DVD-V

(Dolby Digital, 3-channel or over, where the dialogue i recorded in the center channel)

Remote control only

This makes the dialogue in movies easier to hear.

Press [D D.ENH].

Each time you press the button:

ON ← → OFF (Factory preset)

Note

DIALOGUE ENHANCER will not work, or will have less effect with some discs.

ONE TOUCH CINEMA MEMORY

Remote control only

This feature allows you to reselect the settings you made for ADVANCED SURROUND, BASS PLUS, CINEMA, and DIALOGUE ENHANCER with one button press.

Putting the settings into memory

After making the settings

Press and hold [ONE TOUCH MEMORY].

The settings remain in the memory even if the unit is switched to standby.



Recalling the settings

Press [ONE TOUCH MEMORY].

To cancel

Press [ONE TOUCH MEMORY] to turn it off and return the settings for the features to the factory preset.

OFF

● A ADVANCED SURROUND: OFF ● B BASS PLUS: 1 • C CINEMA: Nor.

D DIALOGUE ENHANCER:

4:3 TV ZOOM function

DVD-V

Remote control only

Widescreen software often appears as a letterbox picture (\Rightarrow page 8) when shown on a regular 4:3 aspect television. Use 4:3 TV ZOOM to expand these pictures to fill more of the television. (The sides of the picture are cut off when you do this.)

During play Press [ZOOM].

Each time you press the button:

ON -----OFF (Factory preset)

 4:3 TV ZOOM is canceled when the disc tray is opened or the unit is switched to standby.

ON

Note

- Depending on the video format of the disc and current play status, this feature may not work as described.
- •Menus may act or appear differently while 4:3 TV ZOOM is on.

Changing soundtracks, subtitles and angles

DVD-V

Remote control only

Some DVDs have multiple soundtracks, subtitle languages and camera angles, and you can change them during play.

• "-" or "- -" is displayed instead of the language number in circumstances such as when no languages is recorded on the disc.

Soundtracks

During play

Press [AUDIO].

The number changes each time you press the button.



Indicates that a multi-channel soundtrack can be down-mixed to two channels.



- You can also use this button to turn the vocals on and off on karaoke discs. Read the disc's instructions for details.

Subtitles

During play

Press [SUBTITLE].

The number changes each time you press the button.



- In some cases, the subtitle language is not changed to the selected one immediately.
- If the subtitles overlap closed captions recorded on discs, turn the subtitles off.

To clear/display the subtitles

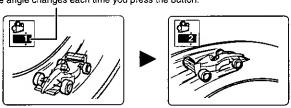
- Press [SUBTITLE].
- Press [►].
- Press (▲, ▼) to select "OFF" or "ON".

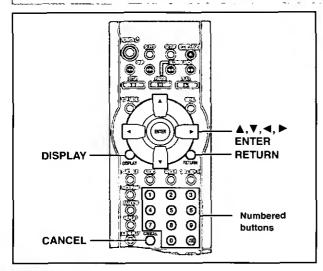
Angles

During play

Press [ANGLE].

The angle changes each time you press the button.





DVD-V CD VCD

On-Screen Menu Icons are menus that contain information about the disc or unit. These menus allow you to perform operations by changing this

Common procedures

Remote control only

Press [DISPLAY].

Each time you press the button:

Original display --- Unit information (= step 2)

Unit information only

While the leftmost icon is highlighted

Press [▲, ▼] to select the menu.

Each time you press the button:

Play menu - Video menu

Display menu ←→ Audio menu

- Press [◀, ▶] to select the item.
- Press [▲, ▼] to select the setting.
 - •Items with "▲" or "▼" above and below can be changed by [▲, ▼]. . Press [ENTER] if the setting does not change after pressing [▲, ▼].
 - •Some items require different operations. Read the following explanations.

For your reference

- . Depending on the condition of the unit (playing, stopped, etc.) and the type of software, there are some items that you cannot select or change. •When numbers are displayed (e.g. title No.), the numbered buttons are
- also effective for setting. Press [ENTER] to register the setting.

To clear the icons

Press [RETURN] until the menus disappear.

■ To change the position of the icons

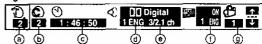
- Press [◄, ▶] to select the position icon.
- 2. Press [▲, ▼] to move the icons.

(There are 5 positions.)

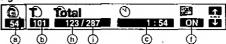


Disc information

e.g. DVD-Video



e.g. MP3/WMA disc



e.g. Video CD



- (a) T: Title number DVD-V Track number (CD) (VCD)
 - G: Group number (MP3/WMA)
 - C: Chapter number DVD-V T: Track number in group (MP3/WMA)
- Time DVD-V
- Press [▲, ▼] to show the elapsed play time or remaining time for the title (or chapter during program and random play).
- Select a position to start play by specifying a time with the numbered buttons and press [ENTER].

Changing the time display [OD] [VCD]

Press [▲, ▼] to show the elapsed play time, remaining time for the track, or remaining time for the disc.

Elapsed play time (CD) (MP3 /WMA) (display only, cannot be changed)

Soundtrack language DVD-V (→ page 13)

(See A below for language abbreviations.) Audio signal type DVD-V (→ page 13)

(See B below for details.)

Karaoke vocal on/off (Karaoke DVD only) DVD-V Solo: OFF or ON

Duet: OFF, V1 + V2, V1 or V2

Subtitle language DVD-V (= page 13) (See A below for language abbreviations.) Subtitles on/off DVD-V

ON ←→ OFF

Group/Track name display on/off [60] (MP3/WMA) ON ←→ OFF

Angle number OVD-V (⇒ page 13)

Track number in disc CD (MP3/WMA)

Total number of tracks on disc (MP3/WMA)

Audio mode VCD

Menu play VCD (with playback control only) Indicates whether menu play (playback control) is on or off.

Audio/Subtitle language

ENG: English SVE: Swedish FRA: French NOR: Norwegian DEU: German DAN: Danish ITA: Italian

POR: Portuguese RUS: Russian

KOR: Korean MAL: Malay VIE: Vietnamese THA: Thai

Chinese

CHI:

ESP: Spanish NLD: Dutch JPN: Japanese

Others

Signal type/data LPCM/DD Digital/DTS/MPEG: Signal type k (kHz):

Sampling frequency ь (bit): Number of bits ch (channel): Number of channels

Example: 3/2

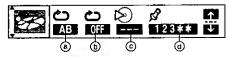
_ .1: Subwoofer signat

(not displayed if there is no subwoofer signal)

- 0: No surround
 - 1: Mono surround
 - 2: Stereo surround (left/right)
 - 1: Center
 - 2: Front left+Front right
 - 3: Front left+Front right+Center

Unit information

Play menu



(a) A-B repeat DVD-V CD VCD (→ page 10)

To cancel: {ENTER} Bepeat play (→ page 10)

DVD-V C: Chapter

CD VCD T: Track

CD (MP3/WMA) T: Track

A: Selected tracks*

G: Group

OFF

T: Title A: Entire disc Selected tracks* A: Selected chapters*

*During program and random play

© Play mode display DVD-V CD VCD

Normal play PGM: Program play RND: Random play

(d) Marker DVD-V GD [VCD]

You can mark up to 5 positions to play again.

[ENTER] (The unit is now ready to accept markers.) To mark a position: [ENTER] (at the desired point)

To mark another position: [◄, ▶] = [ENTER]

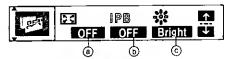
To recall a marker:

[**◄**, **▶**] **→** [ENTER]

To erase a marker:

[**◄**, ▶] ⇒ [CANCEL]

Display menu



(a) 4:3 TV ZOOM DVD-V (→ page 13)

ON ←→OFF

b IPB display DVD-V (→ page 21, Glossary)

ON ←→OFF

Displays the picture type (I/P/B) in the still picture mode.

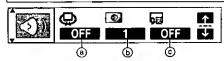
© Display dimmer DVD-V CD VCD

Changes the brightness of the unit's display.

Bright ←→ Dim ←→ Auto* (DVD-V VCD)

*The display is dimmed during play, but brightens when you perform operations such as slow-motion, search, and pause.

Audio menu

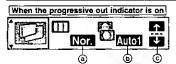


(a) ADVANCED SURROUND DVD-V (→ page 12)

 BASS PLUS DVD-V CD VCD (→ page 12) 1 ←→2 ←→OFF

DIALOGUE ENHANCER DVD-V (→ page 12) ON ←→OFF

Video menu



② Digital picture mode DVD-V [VCD] (→ page 12, CINEMA)

Nor.: Normal mode

Cin.1: Mellows images and enhances detail in dark scenes

Cin.2: Sharpens images and enhances detail in dark scenes

Transfer MODE DVD-V VCD

Select the method of conversion for progressive output to suit the type of material being played. (= page 21, Glossary—Film and video)

Auto 1 (normal): for film material

 Auto 2: for film material (the same as Auto 1, but able to convert 30frame-per-second progressive video.)

Video: for video material

Horizontal position DVD-V VCD

Change the picture's position if it is off center.

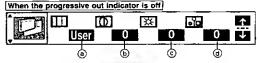
1. Highlight the position icon.

2. Press [1].

3. Press [1] (left) or [3] (right) to move the picture.

4. Press [4] to enter the position (saved even if you turn the unit off).

To return to the factory-set position: Press [2] in step 3.



a Digital picture mode DVD-V VCD (→ page 12, CINEMA)

Nor.: Normal mode

Cin.1: Mellows images and enhances detail in dark scenes

Cin.2: Sharpens images and enhances detail in dark scenes.

User: User mode

The following items are displayed when you select "User".

Contrast (-7 to +7)

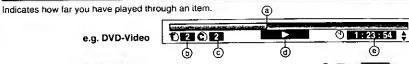
Increases the contrast between light and dark parts of the picture.

Brightness (0 to +15) Brightens the picture.

Color (-7 to +7)

Adjust the shade of the picture's color.

Progress indicator



(a) Current position DVD-V CD VCD

(b) T: Title number DVD-V

Track number GD VCD G: Group number GD (MP3/WMA)

C: Chapter number DVD-V

T: Track number in group CD (MP3/WMA)

@ Condition - play, pause, or slow/search DVD-V CD VCD

Time DVD-V

 Press [▲, ▼] to show the elapsed play time or remaining time for the title (or chapter during program and random play).

 Select a position to start play by specifying a time with the numbered buttons and press [ENTER].

Changing the time display CD VCD

Press [▲, ▼] to show the elapsed play time or remaining time for the

Elapsed play time (MP3/WMA)

(display only, cannot be changed)

Changing settings

This chart shows the settings for this unit. Change the settings to suit your preferences and to suit the unit to the environment in which it is being used. These settings are retained in memory until they are changed, even if the unit is turned off. See page 17 for details on menu operation.

Menus	Items	Options (Underlined items are the factory preset.)
Disc	Audio OVD-V Choose the preferred audio language.	English French Spanish Original*1 Other ****** Other ****** Other ******* Other ********
	Subtitle DVD-V Choose the preferred subtitle language.	Automatic*3 English French Spanish Other ******
	Menus DVD-V Choose the preferred language for disc menus.	English French Spanish Other ****** Other ***** Other *******
	Ratings DVD-V Set a ratings level to limit DVD play.	Setting ratings (When level 8 is selected) 8 No Limit 1 to 7*4 0 Lock All
	 The password screen is shown if you choose levels 0 to 7 or if you choose "Ratings" when levels 0 to 7 have been selected. (→ page 17) Select "Level 0" to prevent play of discs that do not have ratings levels recorded on them. 	Changing ratings (When level 0–7 is selected) Unlock Player Change Password Change Level Temporary Unlock
Video	TV Aspect (→ page 8) Choose the setting to suit your television and preference.	4;3 Pan&Scan 4:3 Letterbox 16:9
	Progressive Out Choose "Enable" to enable progressive output.	<u>Disable</u> Enable
	Still Mode (- page 21, Glossary—Frame still and field still) Specify the type of picture shown when paused.	Automatic Field Frame
	Black Level Control Change the black level of the picture if you connected a television through the COMPONENT VIDEO OUT terminals.	Lighter: when connected to a TV through the VIDEO OUT or S VIDEO OUT terminal. Darker: when connected to a TV through the COMPONENT VIDEO OUT (Y/Pe/Ph) terminals.
Audio	PCM Down Conversion DVD-V (= page 17)	No Yes
6	Dolby Digital DVD-V (→ page 17)	Bitstream PCM
	DTS Digital Surround DVD-V (→ page 17)	Off Bitstream
	D. Range Compression DVD-V Dolby Digital only (■ page 21, Glossary) Change the dynamic range for late night viewing.	Qff On
	Audio during Search ^{e5} Choose whether to have sound during search.	On Off
Display	Menu Language Choose the language for these menus and the on-screen messages.	English Français Español
	On-Screen Messages Choose whether to show on-screen messages or not.	<u>On</u> Off
Others -	Demo A demonstration of the unit's on-screen displays starts when you select "On". The demonstration stops when you press a button and the setting reverts to "Off".	Off On
	QUICK SETUP (→ page 8) Answer questions to make basic settings.	Yes <u>No</u>

[■]¹ The original language of each disc will be selected.

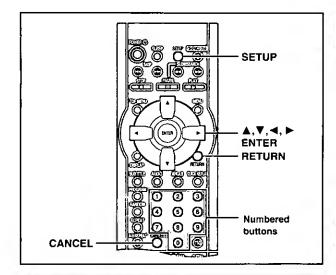
Abkhazian:	6566	Byelorussiar		Georgian:	7565	Kazakh:	7575	Nauru:	7865	Serbian:	8382	Tibetan:	6679
Afar:	6565		6 669	German:	6869	Kirghiz:	7589	Nepali:	7869	Serbo-Croati	an:	Tigrinya:	8473
Afrikaans:	6570	Cambodian:		Greek:	6976	Korean:	7579	Norwegian:	7879		8372	Tonga:	8479
Albanian:	8381	Catalan:	6765	Greenlandic:		Kurdish:	7585	Oriya:	7982	Shoлa:	8378	Turkish:	8482
Ameharic:	6577	Chinese:	9072	Guarani:	7178	Laotian:	7679	Pashto, Pus	hto:	Sindhi:	8368	Turkmen:	8475
Arabic:	6582	Corsican:	6779	Gujarati:	7185	Latin:	7665		8083	Singhalese:	8373	Twi:	8487
Armenian:	7289	Croatian:	7282	Hausa:	7265	Latvian, Lett		Persian:	7065	Slovak:	8375	Ukrainian:	8575
Assamese:	6583	Czech:	6783	Hebrew:	7387		7686	Polish:	8076	Slovenian:	8376	Urdu:	8582
Aymara:	6588	Danish:	6865	Hindi:	7273	Lingala:	7678	Portuguese:	8084	Somali:	8379	Uzbek:	8590
Azerbaijani:	6590	Dutch:	7876	Hungarian:	7285	Lithuanian:	7684	Punjabi:	8065	Spanish:	6983	Vietnamese	
Bashkir:	6665	English:	6978	lcelandic:	7383	Macedonian	:7775	Quechua:	8185	Sundanese:	8385	Volapūk:	8679
Basque:	6985	Esperanto:	6979	Indonesian:	7378	Malagasy:	7771	Rhaeto-Romai	nce:	Swahili:	8387	Welsh:	6789
Bengali; Ban	gla:	Estonian:	6984	Interlingua:	7365	Malay:	7783		8277	Swedish:	8386	Wolof:	8779
	6678	Faroese:	7079	Irish:	7165	Malayalam:	7776	Romanian:	8279	Tagalog:	8476	Xhosa:	8872
Bhutani:	6890	Fijî:	7074	Italian:	7384	Maitese:	7784	Russian:	8285	Tajik:	8471	Yiddish:	7473
Bihari:	6672	Finnish:	7073	Japanese:	7465	Maori:	7773	Samoan:	8377	Tamil:	8465	Yoruba:	8979
Breton:	6682	French:	7082	Javanese:	7487	Marathi:	7782	Sanskrit:	8365	Tatar:	8484	Zulu:	9085
Bulgarian:	6671	Frisian:	7089	Kannada:	7578	Moldavian:	7779	Scots Gaelio		Telugu:	8469		5500
Burmese:	7789	Galician:	7176	Kashmiri:	7583	Mongolian:	7778		7168	Thai:	8472		

^{*2} Input a code number with the numbered buttons (=> below).

^{*3} If the language selected for "Audio" is not available, subtitles of that language will automatically appear if available on that disc.

^{**} Prohibits play of DVDs with corresponding ratings recorded on them.

^{*5} This feature doesn't work for WMA files.

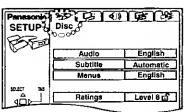


Common procedures

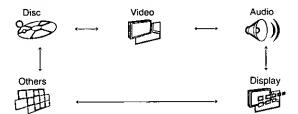
Remote control only

See page 16 for menu and option details.

1 Press [SETUP] to show the menus.



- •The QUICK SETUP screen appears when you press [SETUP] the first time after purchase (⇒ page 8).
- 2 Press [◄, ▶] to select the menu's tab. The screen changes to display the menu.



- 3 Press [▲, ▼] to select the item you want to change and press [ENTER].
- 4 Press [▲, ▼] to select the option and press [ENTER].

The screen now shows the menu again.

To return to the previous screen Press [RETURN].

To exit the SETUP menu Press [SETUP].

Entering a password (Ratings)

DVD-V

The password screen is shown when you select levels 0 to 7.

- Input a 4-digit password with the numbered buttons and press [ENTER].
 - If you enter a wrong number, press [CANCEL] to erase it before you press [ENTER].
 - •The lock symbol appears closed to show the rating is locked.
 - Do not forget your password.
- Press [ENTER] to confirm the 4 digits.

Now, when you insert a DVD that exceeds the ratings limit you set, a message appears on the television.

Follow the on-screen instructions.

Digital output

DVD-V

Change the settings when you have connected equipment through this unit's DIGITAL AUDIO OUT terminal (OPTICAL).

PCM Down Conversion

Select how to output audio with a sampling frequency of 96 kHz. Select "Yes" if the equipment you connect cannot process signals with a sampling frequency of 96 kHz.

•Select "No" if you use analog connection irrespective of the type of equipment.

No (Factory preset):

Output as 96 kHz. There is no output if the disc has copy protection. Select "Yes" in this case.

Yes:

Converted to 48 kHz for output.

Dolby Digital and DTS Digital Surround

Bitstream (Factory preset for Dolby Digital):

Select if the equipment you connected can decode the signal.

рсм.

Select if the equipment you connected cannot decode the signal.

Off (Factory preset for DTS Digital Surround):

Select if the equipment you connected cannot decode the signal.

IMPORTANT

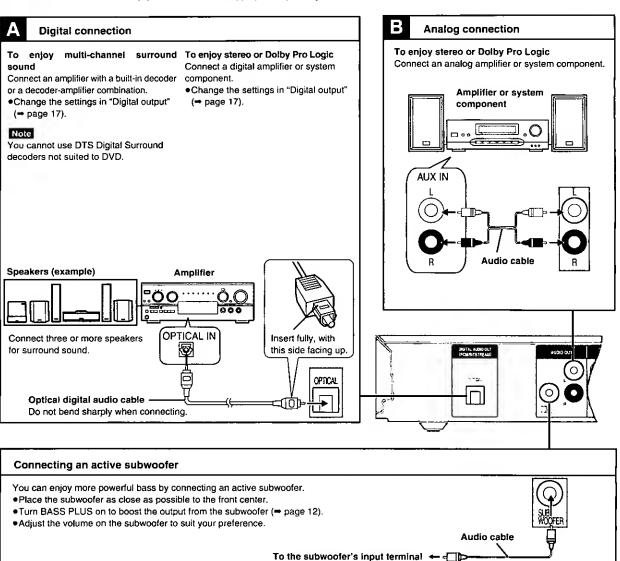
If the equipment you connected cannot decode the signal, the setting must be changed to PCM or Off. If not, signals the equipment cannot process will be output by this unit, causing high levels of noise which can damage your hearing and the speakers.

Home Theater—Enjoying more powerful sound

This model can play Dolby Digital, but only in two channels. This model does not have a DTS decoder. You must connect a unit with a Dolby Digital or DTS decoder to enjoy surround sound.

Note

- The equipment connections described are examples.
- Peripheral equipment and optional cables sold separately unless otherwise indicated.
- Before connection, turn off all equipment and read the appropriate operating instructions.



■ Recording to digital recording equipment or cassette tapes

Digital recording

Note

- With DVD, the following conditions must be met: (a) the disc doesn't have protection preventing digital recording, and (b) the recording equipment can handle signals with a sampling frequency of 48 kHz.
- You cannot record DTS signals.
- You cannot record MP3/WMA.

When recording DVDs, make the following settings. ADVANCED SURROUND: OFF (= page 12) PCM Down Conversion: Yes (= page 17) Dolby Digital: PCM (= page 17) DTS Digital Surround: Off (= page 17)

Analog recording

You can record to a cassette deck or other recording equipment. (- Connection above)

There are no limitations on recording analog signals as there are with digital signals.

Specifications

Signal system:

NTSC

Operating temperature range:

+5 to +35 °C (+41 to +95 °F)

Operating humidity range:

5 to 90 % RH (no condensation)

Discs played [8 cm (3 ") or 12 cm (5 ")]:

- (1) DVD-Video
- (2) DVD-R (DVD-Video compatible)
- (3) CD-Audio (CD-DA)
- (4) Video CD
- (5) CD-R/CD-RW (CD-DA, Video CD formatted discs)
- (6) MP3/WMA
 - Maximum number of tracks and groups recognizable: 999 tracks and 99 groups
 - Compatible compression rate:

MP3:

between 32 kbps and 320 kbps between 48 kbps and 192 kbps

WMA: Video output:

> Output level: Output connector: Number of connectors:

1 Vp-p (75 Ω) Pin jack

S video output:

Y output level: C output level: Output connector:

1 Vp-p (75 Ω) 0.286 Vp-p (75 Ω)

1 system

Number of connectors: Component video output (480P/480I):

S terminal 1 system

Y output level: Ps output level: Prioutput level: Output connector:

1 Vp-p (75 Ω) 0.7 Vp-p (75 Ω) 0.7 Vp-p (75 Ω) Pin iack

(Y: green, Ps: blue, Ps: red)

Number of connectors:

1 system

Audio output:

Output level: 2 Vrms (1 kHz. 0 dB) Pin lack

Output connector:

Number of connectors:

2 channel: 1 system

Subwoofer output (0.1 channel):

1 system

Audio performance:

(1) Frequency response:

DVD (linear audio);

4 Hz-22 kHz (48 kHz sampling) 4 Hz-44 kHz (96 kHz sampling)

4 Hz-20 kHz

●CD audio: (2) S/N ratio:

CD audio: 115 dB

(3) Dynamic range:

 DVD (linear audio): 102 dB CD audio: 98 dB

(4) Total harmonic distortion: CD audio:

Digital audio output:

Pickup:

Optical digital output: Wave length: Optical terminal 658 nm/790 nm

0.0025 %

Laser power:

CLASS IIa/CLASS I AC 120 V, 60 Hz

Power supply: Power consumption: 14 W

Dimensions:

430 (W)×267 (D)×60 (H) mm [16 15/16" (W)×10 2/4" (D)×2 6/16" (H)]

Mass: 2.4 kg (5.3 lb.)

Power consumption in standby mode: approx. 2 W

Specifications are subject to change without notice. Mass and dimensions are approximate.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

"DTS", "DTS Digital Surround" and "DTS Digital Out" are registered trademarks of Digital Theater Systems, Inc.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, and 4,819,098, licensed for limited viewing uses only.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Troubleshooting guide

Before requesting service, make the below checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or web site (http://www.panasonic.com).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 1-800-561-5505, web site (www.panasonic.ca), or an authorized Servicentre closest to you.

Power		Page
No power.	●Insert the AC power supply cord securely into the household AC outlet.	7
The unit is automatically switched to the standby mode.	•To conserve power, the unit automatically switches to standby after approximately 30 minutes in the stop mode. Turn the power back to ON.	-
	●The unit was switched to standby by the SLEEP timer.	9

Operation

Operation		
No response when buttons pressed.	● Some operations may be prohibited by the disc. •The unit may not be operating properly due to lightning, static electricity or some other external factor. Reset procedure: Press [POWER ₺] to switch the unit to the standby mode and then back to ON. Alternatively, press [POWER ₺] to switch the unit to the standby mode, disconnect the AC power supply cord, and then reconnect it.	=
No operations can be performed with the remote control.	Check that the batteries are installed correctly. The batteries are depleted: Replace them with new ones. Point the remote control at the remote control signal sensor and operate.	6 6 6
Play doesn't start (or stops immediately) when you press [▶] (PLAY).	Condensation has formed: Wait 1 to 2 hours for it to evaporate. This unit cannot play discs other than the ones listed in these operating instructions. You can only play DVD if their region number is "1", "ALL" or multiple region number including "1". The disc may be dirty and require cleaning. Ensure that the disc is installed with the label of the side to be played facing upwards.	5 Cover - 8
Cannot select alternative languages.	This function is dependent on software availability. Try selecting from the disc's menu if one is available.	- 9
No menu play.	This function is dependent on software availability.	
No subtitles.	This function is dependent on software availability. Subtitles are cleared from the television. Display the subtitles.	_ 13
Soundtrack and/or subtitle language is not the one selected with the SETUP menus.	This function is dependent on software availability.	-
Cannot change angle.	This function is dependent on software availability. Even if a disc has a number of angles recorded, these angles may be recorded for specific scenes only.	13
DIALOGUE ENHANCER has no effect.	This feature does not work when the unit is outputting bitstream signals.	-
You have forgotten your ratings password. Reset all the settings to Factory Preset.	 While stopped, press and hold [I◄◄] and [II] on the unit and then also press and hold [▲] on the unit until "Initialized" disappears from the television. Turn the unit off and on again. All settings will return to the default values. 	-
The progressive out indicator does not light.	Go to the Video menu in the SETUP menus, and select "Enable" in "Progressive Out".	16

Picture

Picture distorted.	Some distortion is normal during SEARCH.	-
No picture.	Check the connection. Make sure the television is on. Ensure the television's video input setting (e.g., VIDEO 1) is correct.	7 -
The picture shown on the television is not normal. (The sides of the picture are cut off, the picture is stretched horizontally, or black bands appear at the top and bottom of the screen.)	Go to the Video menu in the SETUP menus, and change "TV Aspect" to suit your television. You may also need to change the screen mode on the television itself. Use the television to change the aspect to the correct one. If your television cannot change the aspect when input is progressive Press [PROGRESSIVE OUT] so the indicator goes out. Output will now be interlace. The 4:3 TV ZOOM function is on.	8, 16 8 13 7
There is ghosting when progressive output is on.	Press [PROGRESSIVE OUT] to turn progressive output off. This problem is caused by the editing method or material used on DVD, but should be corrected if you use interlace output.	8
Picture quality is poor.	Check the settings in the On-Screen Menu Icons' Video menu.	15
The picture is off center when progressive output is on.	Adjust the horizontal position in the On-Screen Menu Icons' Video menu.	15

Sound Page No sound Check the connections 7, 18 Check the volume on the equipment you have connected. Distorted sound. •Ensure that the input settings for the television and stereo system are correct. Turn ADVANCED SURROUND off if it causes distortion. 12 Plercing noise comes from the •If you have connected this unit to other equipment through the DIGITAL AUDIO OUT terminal. 17 ensure you have selected the correct settings for "Dolby Digital" and "DTS Digital Surround" in speakers the SETUP menu's Audio menu.

Unit displays

"NoPLAY"	■You inserted a disc the unit cannot play; insert one it can.	
"CHECK DISC"	Disc is dirty: wipe it clean.	-
"H□□" □□ stands for a number.	■ Trouble may have occurred. The number following "H" depends on the status of the unit. Reset procedure: Press [POWER ①] to switch the unit to the standby mode and then back to ON. Alternatively, press [POWER ①] to switch the unit to the standby mode, disconnect the AC power supply cord, and then reconnect it. If the service numbers fail to clear, note the service number and contact a qualified service person.	-
"NoDISC"	You haven't inserted a disc; insert one. You haven't inserted the disc correctly; insert it correctly.	- 8

Television displays

"The progressive out Is set to "Disable""	●Go to the Video menu in the SETUP menus, and select "Enable" in "Progressive Out".	16
"The software has a 4:3 aspect ratio"	Use the television to change the aspect to the correct one. If your television cannot change the aspect when input is progressive Press [PROGRESSIVE OUT] so the indicator goes out. Output will now be interface.	8
No on-screen display.	Go to Display in the SETUP menus, and select "On" for "On-Screen Messages".	
On-screen displays (including On-Screen Menu Icons) not displayed or only partially displayed on the television.	 Press [DISPLAY], and press [◄, ▶] to highlight the rightmost icon, then press [▲, ▼] to adjust the position. 	14
The disc's menu is displayed in a different language.	Go to Disc in the SETUP menus, and select the preferred language for "Menus".	16

Glossary

Bitstream

This is the digital form of multi-channel audio data (e.g., 5.1 channel) before it is decoded into its various channels.

Decoder

A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

Dolby Digital

This is a method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2-channel) audio, these signals can also be multichannel audio. A large amount of audio information can be recorded on one disc using this method.

Dolby Pro Logic

A surround system where a 4-channel audio track is recorded as 2 channels and then is restored to 4 channels for play. The surround channel is monaural and can reproduce up to 7 kHz.

DTS (Digital Theater Systems)

This surround system is used in many movie theaters around the world. There is good separation between the channels, so realistic sound effects are possible.

Dynamic range

Dynamic range is the difference between the lowest level of sound that can be heard above the noise of the equipment and the highest level of sound before distortion occurs.

Film and video

DVD-Videos are recorded using either film or video. Usually, film is recorded at 24 frames per second, the rate movies are filmed at, while video is recorded at 30 frames per second.

Frame still and field still

Frames are the still pictures that go together to make a moving picture. There are about 30 frames shown each second.

One frame is made up of two fields. A regular television shows these fields one after the other to create frames.

A still is shown when you pause a moving picture. A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high. A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

Interlace and progressive output

NTSC, the video signal standard, has 480 interlaced (i) scan lines, whereas progressive scanning uses twice the number of scan lines. This is called 480p. The video signals output from this unit's COMPONENT VIDEO OUT terminals (Y, Pa, Pa) allow you to enjoy higher quality pictures than if the signals were output from the VIDEO OUTPUT terminal or S VIDEO OUT terminal

I/P/E

MPEG 2, the video compression standard adopted for use with DVD-Video, codes frames using these 3 picture types.

- l: Intra coded picture
 - This picture has the best quality and is the best to use when adjusting the picture.
- P: Predictive coded picture
- This picture is calculated based on past I or P-pictures.
- B: Bidirectionally-predictive coded picture
- This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

Linear PCM (pulse code modulation)

These are uncompressed digital signals, similar to those found on CDs.

Playback control (PBC)

If a Video CD has playback control, you can select scenes and information with menus (called menu play in these instructions).

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way Secaucus, New Jersey 07094 Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.

Ave. 65 de Infantería, Km. 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic DVD Player/Recorder Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship. Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product or Part Name	Parts	Labor
DVD Player	One (1) Year	Ninety (90) Days
DVD Recorder	One (1) Year	One (1) Year
Rechargeable Batteries, DVD-RAM Disc (in exchange for defective item)	Ten (10) Days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In-or Mail-In Service

For Carry-In or Mail-In Service in the United States call 1-800-211-PANA (7262) or visit Panasonic Web Site: http://www.panasonic.com

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSCOUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, travel to and from the servicer, loss of media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.) ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Customer Services Directory (ONLY FOR U.S.A.)

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact: 1-800-211-PANA (7262), Monday–Friday 9 am–9 pm; Saturday–Sunday 9 am–7 pm, EST.

Web Site: http://www.panasonic.com You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)
Panasonic Services Company 20421 84th Avenue South, Kent,
WA 98032

(6 am to 5 pm Monday-Friday; 6 am to 10:30 am Saturday; PST) (Visa, MasterCard, Discover Card, American Express, Check)

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicenter: Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Phone (787) 750-4300 Fax (787) 768-2910

Product Service

- Damage requiring service—The unit should be serviced by qualified service personnel if:
 - (a) The AC power supply cord or AC adaptor has been damaged; or
 - (b) Objects or liquids have gotten into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped or the cabinet damaged.
- Servicing—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- 3. Replacement parts—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- 4. Safety check—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

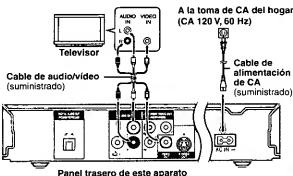
Product information

For product information or assistance with product operation:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or web site (http://www.panasonic.com).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 1-800-561-5505, web site (www.panasonic.ca), or an authorized Servicentre closest to you.

Conexión a un televisor Cable de audio/vídeo Rojo(R) -Blanco(L) all Amarillo(Vídeo) -□



Para distrutar de vídeo progresivo

Haga la conexión a los terminales de entrada de vídeo componente (480p) de una televisión compatible con el sistema de protección contra el copiado de esta unidad.

(La imagen no se verá correctamente si se hace la conexión a una televisión incompatible.)

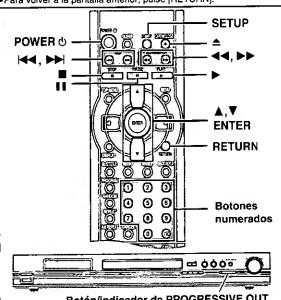
Preparación Rápida

Mando a distancia solamente

La pantalta Preparación Rápida aparece cuando usted pulsa [SETUP] por primera vez después de adquirir el aparato y le ayuda a efectuar los ajustes necesarios.

- Pulse [POWER ()] para encender el aparato.
- Pulse [SETUP] para visualizar la pantalla "QUICK SETUP".
- Pulse [▲, ▼] para seleccionar "Español" y pulse [ENTER]. Pulse [▲, ▼] para seleccionar "Sí" y pulse [ENTER].
- Pulse [▲, ▼] para seleccionar el elemento y pulse [ENTER].
- - Idioma de audio
 - Idioma de subtítulos
 - Aspecto de su televisor
 - Salida progresiva
- Pulse [ENTER] y luego [SETUP] para finalizar los ajustes.

Para volver a la pantalla anterior, pulse [RETURN].



Botón/indicador de PROGRESSIVE OUT

Las operaciones descritas en esta referencia rápida se llevan a cabo con el mando a distancia, pero usted puede hacer también estas operaciones en el aparato principal si los controles son los mismos.

Reproducción básica

DVD-V CD VCD

Preparación

Encienda el televisor y seleccione en él la entrada de vídeo apropiada según las conexiones del reproductor.

Pulse [POWER (b)] para encender el aparato. Para salida progresiva

Pulse [PROGRESSIVE OUT] para que se enciendan los indicadores.

- Pulse [▲] para abrir el cajón.
- Ponga lo disco en la bandeja de disco.

Pulse [▶] (PLAY).

La bandeja del disco se cierra y la reproducción.

Para detener la reproducción

Pulse [■] (consulte Función de reanudación indicada más abajo).

Para hacer una pausa

Pulse [II] durante la reproducción.

Pulse [▶] (PLAY) para reanudar la reproducción.

Nota

- La salida progresiva no es posible si el ajuste "Salida progresiva" de los menús Preparación Rápida se deja en "Desactivar".
- Aunque se encienda el indicador de salida progresiva, si usted pulsa [PROGRESSIVE OUT] después de cambiar el ajuste "Salida progresiva" a "Activar", la salida sólo seguirá intercalándose si usted ha conectado la unidad a su televisor a través de los terminales VIDEO OUT 6 S VIDEO OUT.

Cuando una pantalla de menús aparece en el televisor

DVD-V VCD

Mando a distancia solamente

Pulse los botones numerados para seleccionar un elemento.

Función de reanudación

Parada-reanudación

El aparato momoriza la posición en la que usted detuvo la reproducción hasta que usted abre la bandeja del disco o pone el aparato en el modo de espera.

Para reanudar la reproducción

Pulse [▶] (PLAY) mientras parpadea "▷" en el visualizador del aparato.

Salto de capítulos o pistas

Durante la reproducción o durante la pausa

Pulse [| ◀ ◀] o [▶ ▶ |].

Avance rápido y rebobinado—SEARCH

Durante la reproducción

Pulse [◀◀] o [▶▶].

Reproducción a cámara lenta DVD-V VCD

Durante la pausa

Pulse [◀◀] o [▶▶].

Visión cuadro a cuadro DVD-V [VCD]

Durante la pausa

Pulse [◀] o [▶].

Pulse [▶] (PLAY) para iniciar la reproducción.

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way Secaucus, New Jersey 07094

http://www.panasonic.com

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